BLACKHAWK CREEK WATERSHED (LR02)

This watershed drains 106 square miles of Rock County east of the Rock River. It is primarily agricultural but does have some highly urbanized areas including parts of Janesville and Beloit.

This watershed has a medium susceptibility for groundwater contamination based on WDNR groundwater susceptibility mapping.

Purple coneflowers found in prairies.

Table 1. Municipalities in the Blackhawk Creek Watershed

Municipality	W/S#	County	1995 Population	2000 Population	Percent Growth 1995 to 2000
T. Janesville	LR02	Rock	3,399	3,750	10.3
C. Janesville	LR02 LR03 LR04	Rock	56,141	59,498	6.0

A number of planning and research activities have taken place in Rock County since 1990. A land use study conducted by Rock County in 1990 found that the town of Janesville was comprised, not surprisingly, of 74.9 % agricultural land; 12.8 % "developed" land (including residential, transportation and industrial uses) and 12.4 % woodlots and water resources (RCPDA, 1991). Both the town of Janesville and the city of Janesville are growing fairly rapidly. The Town of Janesville population has grown 10.3% in the past five years, compared to an 8.9% increase from 1990-1995. The town's agricultural base is slowly changing to a mix of agriculture and residential with homes for commuters who work in the city of Janesville. In 1995, Rock County's Planning and Development Agency produced a development plan for the town of Janesville. The plan identified environmental corridors adjacent to Stevens, Markham and Marsh Creek that roughly correspond to open water and highly erodible soils (RCPDA 1995).

The city of Janesville population has grown 6% from 1995 - 2000, triple the percentage from 1985 – 1995 when the population grew only 2% (RCPDA 1989). In 1993, the city developed its own land use, population and housing analyses. An environmental analysis was conducted in 1983. The city's land use analysis described the city's growth, both in acreage from annexations and in population. While growth continues, the city's residential density has decreased, mainly from new subdivisions on the periphery of the central urban area. The area surrounding Spring Brook creek is demarcated as an environmental corridor, as are areas on the west side of the Rock River above the City of Janesville's central area. The city must deal with the urgent problem of stormwater management, especially during its update to the Janesville Sewer Service Area Plan.

Streambank silt/sediment buildup

Spring Brook drains to the Rock River at Janesville and is one of four streams of the same name in the county. This short, spring-fed stream was managed for trout into the 1950s, when stocking was discontinued due to siltation and channel modifications that

destroyed habitat. The stream's watershed is intensively farmed. Spring Brook's water quality is affected by siltation from farming operations and urban runoff.

Resources of Concern

WDNR's Heritage Resources Database indicates that the following water-dependent endangered, threatened or special concern species and/or communities have been sighted in this watershed within the last 20 years.

Shooting star

Table 2. Endangered, Threatened or Communities of Concern

Plant Community	Location	Indicator Species
Dry Prairie	Rock River Prairie	little bluestem, side-oats grama, silky aster, shooting star, prairie gentian, prairie smoke, etc.
Prairie Remnant	Duggan Road Prairie	Pale-Purple Coneflower, etc.
Dry Prairie	Happy Hollow Dry Prairie	short grasses, little bluestem, side-oats grama; dry prairie forbs
Wet-Mesic Prairie	Tiffany Prairie	deep soil prairie, various
Dry-Mesic Prairie	Vine Prairie	side-oats grama, prairie dropseed, big and little bluestem; false toadflax, purple prairie clover, small skullcap, stiff aster, etc.
Dry-Mesic Prairie	Morningside Prairie	Remnant dry mesic prairie in residential subdivision; rare resources present; trash dumping and weedy invaders present.
Dry Mesic Prairie	Sussex Road Prairie	Located on a gravel hill stop in subdivision development east of Janesville; prairie is included as city park greenspace.
Dry-Mesic Prairie	Harmony Hill Prairie	Severely reduced in size from residential development; prairie never plowed or grazed; located on north facing slope of gravel hill. Big and little bluestem, Indian grass and prairie dropseed dominant. Several rare species present.

Prairie smoke

RECOMMENDATIONS

The following recommendations are a basis for work planning or other decisions, which must be approved by the appropriate DNR division administrator. These recommendations are a starting point for the work planning process.

1. The City of Janesville should develop, as part of its comprehensive planning process, a stormwater/soil erosion management plan that integrates previous planning work and provides solid work planning steps for reducing peak hydrologic flows regionally and improve the quality of stormwater through implementation of best management practices.

Blue-joint grass, Common to wet-prairies

2. The City of Janesville should enact and enforce a construction site erosion control ordinance that applies to areas not covered under the existing Uniform Dwelling Code for one- and two-family dwellings and commercial areas or NR 216 rules covering the development of industrial pollution prevention plans.

3. The City of Janesville should enact and enforce a performance-based stormwater management ordinance that includes regular street sweeping, installation of porous pavement where feasible, installation of naturalized retention/detention ponds and a stormwater quality monitoring program.

4. The City of Janesville in cooperation with Rotary Gardens should look at nutrient loading and other watershed impacts to Lions Lake and trout ponds to determine their effects on water quality.

ACKNOWLEDGMENTS

The expertise of Louis Bobolz, Don Bush, David Marshall and Mike Sorge contributed greatly to this report.

Photo credits: Virginia Kline's Vegetation of Wisconsin Collection (all plant pictures other than the following); Mike Sorge (purple coneflowers); Robert Savannah/US Fish and Wildlife Service (closed gentian drawing)

Sunflower, common in dry mesic prairies

REFERENCES (as in the Streams Table)

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Closed/bottle gentian

Table 3. Streams in the Blackhawk Creek Watershed (LR02).

Stream Name	WBIC	County	Length (Miles)	Existing Use (Miles)	Potential Use (Miles)	Supporting Potential Use (Miles)	Current Codified Use	303(d) Status	Use Impairment		Data Assess-ment	Data Level	Trend	References
									Source	Impact				
Blackhawk Creek	0797000	Rock	0 - 2	WWFF/2	WWFF/2	Part - Thr/2	WWSF*	N	NPS, DEV, URB, CL, NPS, BDAM	HAB, TURB, SED, TEMP, DO, FLOW, NUT, CE	E	B3 H1	S	4, 8, 17, 52, 53, 54, 83
			2 - 4	LAL/2	WWFF/2	Not/2	WWSF*	Y	NPS, DEV, URB, CL, NPS, PSB	HAB, TURB, SED, TEMP, DO, FLOW, NUT, CE				
Springbrook Creek	0796800	Rock	5	WWSF/5	WWSF	Part/2	WWSF*	N	HM, CL, SB, CE, URB	HAB, TURB, SED, TEMP, DO, FLOW, NUT	E	B3 H1	S	4, 17, 52, 53, 54, 83
2 Unnamed Streams			6											

Table 4. Lakes in the Blackhawk Creek Watershed (LR02)

Lake Name	County	Town, Range, Section	WBIC	Surface Area (Acres)	Max Depth (ft)	Mean Depth (ft)	Lake Type	Winter kill	Acc-ess	SH	Hg	Mac	LMO	TSI	TSI Class	Lake Plan Prot	P Sens	Impairment		Comments
																		Source	Impact	
Janesville Gravel Pit	Rock	T03NR13E S31	0777000	13	22	--	SP	--	T	--	GA	--	--	--	--	--	I Ins	--	--	--
Lions Park Pond	Rock	T03NR13E S31	0777800	3	15	--	SE	--	T	--	GA	--	--	--	PLAN	--	--	NPS, URB, DEV	HAB, NUT	Study by C. Janesville found stormwater source of excess nutrients
Sheepskin Lake	Rock	T04NR12E S05	0808450	41	4	--	--	Y	--	--	GA	--	--	--	--	--	--	--	--	panfish present
Spauldings Pond	Rock	T03NR13E S10	0780000	28	17	--	SP	N	R	--	GA	--	Y	--	--	--	I Ins	DEV	ACC, NUT	golf course nearby